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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,794	12/09/2003	Glenn D. Williams	LEAR 04147 PUS	4956
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BROOKS KUSHMAN P.C. / LEAR CORPORATION 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075-1238				
			EXAMINER WOLLSCHLAGER, JEFFREY MICHAEL	
			ART UNIT 1732	PAPER NUMBER

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,794

Applicant(s)

WILLIAMS, GLENN D.

Examiner

Jeff Wollschlager

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment to the claims filed June 6, 2006 has been entered. Claims 7-16 have been cancelled. New claim 17 has been added. Claims 1-6 and 17 are pending in the case.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jourquin et al. (U.S. Patent 5,662,996; issued September 2, 1997) in view of Nielsen et al. (U.S. Patent 5,716,588; issued February 10, 1998).

Regarding claim 1, Jourquin et al. teach a method of forming a polyurethane skin for an interior part of a vehicle (col. 1, lines 7-12) comprising: providing an in-mold coating composition (col. 7, lines 19-34); spraying the in-mold coating composition toward a forming surface to create an in-mold coating layer (col. 7, lines 19-34; col. 3, lines 64-67); and applying a layer of polyurethane over the in-mold coating layer to form the polyurethane skin (col. 7, lines 31-57; col. 4, line 1). Jourquin et al. do not explicitly teach providing and utilizing an air assisted spray nozzle capable of delivering an

atomizing air stream and heating the in-mold composition to a temperature above the ambient temperature.

However, Nielsen et al. teach an analogous method wherein they provide and utilize an air assisted spray nozzle capable of delivering an atomizing air stream and heating the in-mold composition to a temperature above the ambient temperature (col. 11, lines 62-66; col. 12, lines 9-31).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to combine the teaching of Jourquin et al. with the air assisted spray nozzle method taught by Nielsen et al. for the purpose, as taught by Nielsen et al., of reducing drying time, reducing energy costs, increasing turbulent mixing to assist atomization, and to counteract the cooling affect of the compressed fluid (col. 1, lines 10-27; col. 1, lines 44-48; col. 11, lines 53-66; col. 12, lines 10-12).

As to claim 2, Nielsen et al. teach heating the atomizing air before it is provided to the nozzle to reduce the heating requirements on the system (col. 12, lines 10-12; col. 1, lines 20-27).

As to claims 3 and 4, Nielsen et al. teach heating the air stream between 30 °C (86 °F) and 90 °C (194 °F) (col. 12, lines 10-15).

As to claim 5, Jourquin et al. teach the layer of polyurethane is performed by spraying a layer of aromatic polyurethane over the in-mold coating layer after a flash cycle (col. 4, lines 1-3; col. 7, lines 19-56).

As to claim 6, Nielsen et al. teach heating the composition of the coating mixture to a temperature that compensates for the drop in spray temperature (col. 2, lines 25-29) and suggests heating the liquid coating mixture to a temperature preferably less than 80 °C (176 °F) (col. 9, lines 64-67; col. 10, lines 1-22). Further Nielsen et al. teach one of the benefits of the process is that it does not require the entire spray chamber to be heated as in conventional spraying (col. 1, lines 20-27).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jourquin et al. (U.S. Patent 5,662,996; issued September 2, 1997) in view of Nielsen et al. (U.S. Patent 5,716,588; issued February 10, 1998) as applied to claims 1-6 above, and further in view of Schowiak (U.S. Patent 4,509,684; issued April 9, 1985).

As to claim 17, Jourquin et al. in view of Nielsen et al. teach the method of claim 1 as discussed in the 103(a) rejection above. Additionally, Jourquin et al. teach that a plurality of different colors and materials may be employed in the method (col. 3, lines 57-67; Examples 2-5) and that those different colors and materials employ the same spray apparatus (4). Jourquin et al. do not explicitly teach the different colors are supplied from a color manifold.

However, Schowiak teaches an analogous method wherein the color for a spray operation is supplied through a color manifold (Abstract).

Therefore it would have been *prima facie* obvious to one of ordinary skill at the time of the claimed invention to employ a color manifold as taught by Schowiak in the

method taught by Jourquin et al. for the purpose, as taught by Schowiak, of effecting rapid color change (Abstract).

Response to Arguments

Applicant's arguments filed June 6, 2006 have been fully considered but they are not persuasive.

Applicant's arguments appear to be on the following grounds:

1. Neither the Jourquin et al. nor the Nielsen et al. reference individually teach or suggest all the limitations of the claimed invention.
2. There is no teaching or suggestion in the references to combine their teachings.

These arguments are not persuasive for the following reasons:

1. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
2. It is the examiner's position that there is a clear teaching and suggestion to combine the references. This teaching and suggestion comes from the references themselves. For example, Jourquin et al. teach a method of forming a polyurethane skin for an interior part having an in-mold coating applied with a spray nozzle. It is noted that the composition employed by Jourquin et al. is a water-borne composition

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(col. 6, lines 25-33 and 55-67, for example) and that Jourquin et al. discloses the solvent evaporation time in Example 2 (col. 7, lines 18-57). Nielsen et al. teach utilizing an air assisted spray nozzle that heats the in-mold coating composition. Nielsen et al. explicitly state the invention is an improved method by which "water-borne coatings having conventional water levels can be sprayed, but with drier coating films applied in order to improve coating performance and shorten drying times" (col. 1, lines 44-48; also see col. 11, lines 53-60). Additionally, Nielsen et al. disclose their method requires less energy than conventional methods (col. 1, lines 10-27). Further, Nielsen et al. teach their method provides for increased turbulent mixing (col. 11, lines 62-66). One having ordinary skill would have been motivated to combine the teachings of Jourquin et al. with the teaching Nielsen et al. in order to reduce the drying time and to reduce energy requirements as is taught by Nielsen et al.

Conclusion

All claims are rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

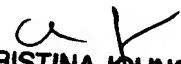
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JW

Jeff Wollschlager
Examiner
Art Unit 1732

August 7, 2006


CHRISTINA JOHNSON
PRIMARY EXAMINER
8/7/06